

Blepiarda of Fiji (Coleoptera: Curculionidae)

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Blepiarda is a cryptorhynchine genus of weevils which was erected by Pascoe in 1865 for the reception of the eastern Australian *Blepiarda undulata*, the genotype, and *B. lophotes* from Fiji. Subsequently, nine other species have been described from the Indo-Malayan, Austro-Malayan, and Australian regions. I believe the genus probably had its origin in Papua. From there it spread westward into the Philippines, southward along the moist, forested east coast of Australia through Queensland, New South Wales, into Victoria, and made its way eastward through the islands to Fiji. Only one species has been recorded from the great area and numerous islands lying between Papua and Fiji, but further collecting will undoubtedly reveal many species in that region.

Genus *Blepiarda* Pascoe

Blepiarda Pascoe: Jour. Ent., vol. 2, p. 430, 1865.

Trichogonus Fairmaire: Petites Nouv. Ent., vol. 2, p. 282, 1878; Ann. Ent. Soc. France, p. 310, 1881. *New synonym.*

I have compared the genotype of *Trichogonus* (*T. unipenicillus* Fairmaire) with the genotype of *Blepiarda* and can find no major structural features to generically separate the two species. When Fairmaire described *Trichogonus* he had the Fijian *Blepiarda lophotes* Pascoe at hand. There are greater differences between *Trichogonus unipenicillus* and *Blepiarda lophotes* than there are between *T. unipenicillus* and the genotype of *Blepiarda*. I believe that the characters which most greatly influenced Fairmaire in separating *Trichogonus* from *Blepiarda* were the length of the second funicular segment and the structure of the lateral margin of the elytra. On the male of *Trichogonus unipenicillus* the second funicular segment is two thirds longer than the first, whereas the first and second segments are subequal in length on the male of *Blepiarda lophotes*; but the male of *Blepiarda undulata* has the second segment one third longer than the first. On the female of *Trichogonus unipenicillus* the second funicular segment is only one fifth longer than the first; on *Blepiarda lophotes* the same is true or it is somewhat more elongate. It seems to me, therefore, that the length of the second funicular segment is subject to interspecific variability and is not a character of generic rank.

On *Blepiarda lophotes* the outside interval on the elytra is expanded over the metepisternum so that that sclerite appears distinctly narrowed midway between the mid and hind coxae. On

Trichogonus unipenicillus, however, the outside interval of the elytra is not expanded and the metepisternum appears subparallel-sided for most of its length, and this is also exactly the structure found in *Blepiarda undulata*. When additional species are examined, it will probably be shown that this character is subject to variation between species.

For these reasons I believe that *Trichogonus* Fairmaire should be merged with *Blepiarda* Pascoe.

***Blepiarda bacillifera* (Heller), new combination.**

Trichogonus bacillifer Heller: Naturforschende Gesellschaft, Basel Verhandlungen, vol. 45, p. 27, fig., 1934.

Although I have not seen this Solomon Islands insect, Heller's description and figure show that the species also belongs to *Blepiarda*.

KEY TO THE FIJIAN SPECIES OF BLEPIARDA

Metepisternum subparallel-sided, fully half as broad at the middle as the length of its oblique apex; second funicular segment of the male two thirds longer than the first; fresh specimens uniformly clothed above with cinnamon-buff scales with the scutellum white

***B. unipenicilla* (Fairmaire)**

Metepisternum conspicuously narrowed at the middle and there not more than one fourth as broad as the length of its oblique apex, distinctly narrowed at the middle by the conspicuous down lobing of the outer elytral interval; scaling predominantly brown interspersed with white scales

***B. lophotes* Pascoe**

1. *Blepiarda unipenicilla* (Fairmaire), new combination.

Trichogonus unipenicillus Fairmaire: Petites Nouv. Ent., p. 282, 1878; Ann. Soc. Ent. France, p. 310, 1881.

Derm black, antennae and tarsi reddish brown; very densely clothed above with cinnamon-buff scales except for the scutellum which forms an outstanding white patch.

Head with a strong interocular fovea and a deep median sulcus that is not conspicuously interrupted in the middle; scaling concolorous. *Rostrum* in the male swollen beyond the base, densely squamose and punctate from base to the insertion of the antennae, and with a short median carina above the antennae; narrowed in female from base to antennae, coarsely punctate and squamose only in basal third, thence smooth, shiny, and subcylindrical. *Antennae* in male inserted just behind mandibles, scape reaching middle of eye but not hind margin; second funicular segment almost twice the length of the first, longer than club and about twice as long as segments three to seven inclusive, which are transverse and moniliform; club cylindrical, slightly shorter than second funicular segment, finely pubescent; first funicular segment without conspicuous setae, two with long, fine, scattered hairs beneath, three to seven each with a whorl of similar hairs that are longer on the inside; club without long hairs; as follows in the female; inserted at middle, scape not reaching middle of eye, second funicular segment about one fifth longer than first and two fifths longer than segments three to seven inclusive, which are transverse and subequal; club distinctly longer than preceding six segments which have whorls of stiff setae but are not hirsute. *Prothorax* concave in longitudinal dorsal outline, apex higher

than sinuate base, subtriangular, about twice as broad as long; with a short, rather inconspicuous median callus; scaling imbricated, concealing the uneven, densely punctate derm; with no fascicles at apex. *Scutellum* elongate, densely clothed with white scales. *Elytra* subparallel-sided in basal two thirds, and thence broadly rounded to apex; base strongly sinuate; the common callus at top of declivity subtubular, giving rise to a very dense, long, sharply pointed fascicle in male, much reduced in female; lateral margin not sinuate; intervals slightly convex, with a few inconspicuous, scattered, irregular callosities; in fresh specimens with two or three irregular rows of white setae that are most conspicuous toward the sides in posterior half; striae not coarsely impressed; covered for the most part by the very dense scaling; the tenth stria traceable from base to apex. *Legs* densely squamose and punctate; femora strongly toothed, tooth on fore femora largest; tibiae angulate near base, occasionally with a small tooth on outer edge at angulation. *Sternum* with mesosternal receptacle strongly produced, extending to a plane below that of fore coxae, its walls very steep, somewhat concave externally on the oblique hind walls, apex much more produced than middle or anterior part of receptacle which slants rapidly dorso-anteriorly; metasternum with an irregular surface, fore margin raised, with only scattered setae in median area. *Venter* dull, rather coarsely punctured, each puncture bearing a short squamiform seta and with a patch of squamae behind the metacoxa; first ventrite concave in male, slightly convex in female. Length 7-10 mm., breadth 3.5-6 mm.

Fairmaire gave the locality for this species only as "Iles Viti." I have before me 31 specimens collected in July 1924 on Moala Island by E. H. Bryan, Jr., and R. H. Beck. I collected a number of specimens from various localities in Fiji in 1938.

This species is easily recognized by the characters given in the key. In addition, the mesosternal receptacle is formed differently. On this species the receptacle is much more produced at the apex than at the middle or near the base, and this character alone will separate *B. unipenicilla* from the other species in which the receptacle is less produced at the apex than it is near the base. On this species the receptacle slopes dorso-anteriorly, whereas on the other Fijian species it slopes dorso-posteriorly. The receptacle on this species more closely resembles that of the genotype, *B. undulata*, than it does the other Fijian species.

2. *Blepiarda lophotes* Pascoe.

Pascoe: Jour. of Ent., vol. 2, p. 432, 1865.

Derm black, antennae and tarsi reddish brown; densely clothed above with pale brown and white scales, the white scales forming a rather vague, pale triangle on the elytra from the fascicle at the top of declivity to humeri, scaling on callosities darker, with a variable, irregular patch of white scales on elytra above metacoxae.

Head with a distinct median sulcus that is somewhat interrupted at its middle, but becomes deeper anteriorly to terminate in a shallow interocular fovea; interocular area distinctly narrowed from base of rostrum to middle of eyes; squamae dense, those on basal half of median sulcus forming an elongate, conspicuous white patch, scales otherwise pale brown. *Rostrum* of male much thicker and heavier than that of female, distinctly swollen before base, coarsely punctured from base to apex, very densely squamose from base to near apex which is obtusely angulate, from insertion of antennae to mandibles, in dorsal outline; in female the rostrum is gradually

narrowed from base to insertion of antennae and is only distinctly punctate and squamose from base to antennae, thence cylindrical, very minutely punctate and shiny to apex. *Antennae* in male inserted just behind mandibles; scape reaching upper margin of eye, slender to apical third where it is clavate and densely squamose, almost as long as funiculus; first two funicular segments very long, subequal in length, two longer than three to seven inclusive which are transverse and moniliform; club one fourth longer than second funicular segment, finely setose; funicular segment one with scales on outside and a few inconspicuous setae below, two with a few elongate setiform scales on outside but very long dense hair on inside, three to seven and basal two thirds of club with similar long hair and without scales; in female as follows: inserted distinctly behind middle of rostrum, scape not reaching past middle of eye, first funicular segment only two thirds to about seven tenths as long as the second which is as long as segments three to seven plus about one sixth of club; club slender, as long as the preceding six segments, funicular segments three to seven with a few long setae, funiculus without long hair as in the male. *Prothorax* subtriangular, broader than long (7:5), base sinuate, with a short carina before the scutellum and four feeble callosities across the middle which give rise to feeble fascicles, setae fasciculate on either side of apex; punctures small and round, separated by distances about equal to their diameters, each bearing an oval scale or a short seta. *Scutellum* subquadrate. *Elytra* subtriangular, especially in male, apex broadly rounded, base strongly sinuate, side margin sinuate, broadly indented above ventrite one; with an elongate callus at top of declivity supporting a thick but short fascicle, very conspicuous in male, but feebly developed or almost obsolete in female; with an elongate basal sutural callus, interval three with an elongate basal callus, four with a shorter callus, elsewhere with a few, scattered, feeble callosities; striae about one fourth as broad as intervals, coarsely impressed at the base, punctures distinct throughout, the tenth stria distinct from base to apex. *Legs* densely squamose, the femora strongly toothed. *Sternum* with anterior margin of metasternum cariniform, median area with setae only, sides densely squamose. *Venter* with first abdominal segment concave in male, convex in female; ventrite five very coarsely, subconfluently punctured, the ventrites otherwise with rounded, well-separated punctures bearing oval scales or an occasional seta. Length, 11-12 mm.; breadth, 5-6 mm.

Described simply from "Fiji." I have five specimens before me, collected on Moala Island by E. H. Bryan, Jr., July 10-13, 1934, and I took more than 100 specimens from a number of localities in 1938.

This is the largest Fijian *Blepiarda* and can be distinguished by its scaling alone.

I had considered a gray form (?) of this species to be distinct from it, because the second segment of the antennae of the female is as long as the first, and not distinctly longer, as in the typical form. On all of these examples the scaling is gray or mostly gray. The males show no differences, however, and their genitalia are similar. I collected a number of specimens of this type, but none in association with the typical form. It may yet be shown that they represent two species, but it is perhaps best that I withhold my description of the gray form.